

CLAIMS

The invention is claimed as follows:

1. A cap for use in a connector making a resealable fluid path comprising:
 - 5 a body defining a fluid flow passage and a disinfectant receptacle;
 - a disinfectant maintained within the disinfectant receptacle; and
 - a seal disposed within the body that seals the disinfectant between the seal and the disinfectant receptacle.
- 10 2. The cap of Claim 1, wherein the body defines an opening that receives a fluid communication member capable of displacing the seal when received by the body.
- 15 3. The cap of Claim 2, wherein the disinfectant disperses between an outer wall of the fluid communication member and an inner wall of the body when the seal is displaced.
4. The cap of Claim 1, wherein the body defines a plurality of outer threads.
5. The cap of Claim 4, wherein the outer threads engage a plurality of mating threads of a shell and enable the shell to translate with respect to the body so that the shell causes a sealed end of the body to be pierced.
- 20 6. The cap of Claim 1, wherein the body defines a plurality of inner threads.
- 25 7. The cap of Claim 6, wherein the inner threads engage a plurality of mating threads of a fluid communication member and enable the fluid communication member to translate with respect to the body so that the fluid communication member causes the seal to be displaced.
- 30 8. The cap of Claim 1, wherein the seal is moveable.

9. The cap of Claim 1, wherein the body includes a tube portion that defines the fluid flow passage and the disinfectant receptacle is disposed about the tube portion.

10. The cap of Claim 1, wherein a portion of the fluid flow passage is sized to
5 house a member that deforms to seal about a tube.

11. The cap of Claim 10, wherein the member automatically closes when the tube is removed from the member.

10 12. A connector for making a resealable fluid path comprising:
a cap defining a fluid flow passage;
an amount of a disinfectant sealed within the cap; and
a shell moveably engaging the cap and including a fluid communication member, wherein the fluid communication member is capable of piercing a sealed end
15 of the cap and fluidly communicating with the fluid flow passage when the shell is moved with respect to the cap.

13. The connector of Claim 12, wherein the disinfectant comprises povidone iodine.

20 14. The connector of Claim 12, which includes a tip protector that abuts an end of the shell that opposes the sealed end of the cap.

15. The connector of Claim 12, wherein the shell attaches to a fluid line running to
25 a dialysate container and the cap attaches to a fluid line running to a patient.

16. The connector of Claim 12, wherein the sealed end of the cap includes a slit septum.

30 17. The connector of Claim 12, which includes an elastomeric seal that seals the amount of disinfectant about the fluid flow passage.

18. A method for providing a sterile connection of a dialysate line comprising the steps of:

providing a cap that has a passage and maintains a seal that houses a disinfectant;

5 connecting a first member to a first end of the cap wherein the first member is in fluid communication with a first dialysate line; and

connecting a second member to a second end of the cap so as to displace the seal and the disinfectant wherein the second member is in fluid communication with a second dialysate line.

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19. The method of Claim 18, wherein connecting the first member includes moving the first member so as to pierce a sealed end of the cap, placing the first member in fluid communication with the second member.

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20. The method of Claim 19, wherein the sealed end of the cap seals about the first member when the first member pierces the sealed end.

21. The method of Claim 19, wherein the sealed end of the cap reseals when the first member is removed from the cap.

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22. The method of Claim 18, wherein rupturing the seal includes threading the second member into the cap and exerting pressure on the seal.

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23. The method of Claim 18, wherein connecting the second member includes displacing the disinfectant between the cap and the second member.

24. The method of Claim 18, which includes maintaining the disinfectant between the cap and the second member after the seal is displaced.

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25. The method of Claim 18, which includes removing the first member from the cap such that the sterile connection between the cap and the second member is maintained.

26. The method of Claim 18, which includes removing a tip protector and connecting the second member in place of the tip protector.

5 27. A method for providing peritoneal dialysis comprising the steps of:
providing a first member in fluid communication with a dialysate container, a
second member in fluid communication with a peritoneal cavity of a patient, and a cap
that has a sealed first end, a second end, a passage and maintains a seal that houses a
disinfectant;

10 connecting the first member to the sealed first end of the cap;
connecting the second member to the second end of the cap so as to displace
the seal and the disinfectant and cause the first member to pierce the sealed first end of
the cap;
filling the peritoneal cavity with an amount of fresh dialysate fluid; and
15 removing the first member and resealing the first end.

28. The method of Claim 27, which includes removing an amount of spent
dialysate fluid from the peritoneal cavity prior to filling the peritoneal cavity with the
fresh dialysate fluid.

20 29. The method of Claim 27, wherein the filling and removing steps are performed
manually.

30. The method of Claim 27, wherein the filling and removing steps are performed
25 automatically.